IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

Jong Soo Woo et al.

Art Unit: 1616
Examiner: Mina Haghighatian

Serial No.: 10/599,729

Filed: October 6, 2006

Title: SUSTAINED RELEASE FORMULATION FOR ORAL ADMINISTRATION OF HMG-COA REDUCTASE INHIBITOR AND METHOD FOR THE PREPARATION THEREOF

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Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

DECLARATION UNDER 37 C.F.R. SECTION 1.132

I, Si Young Jung, being a citizen of the Republic of Korea and presently residing at 302-ho, #290-4, Gosaik-dong, Kwonsun-su, Suwon-si, Kyungki-do, Republic of Korea, do declare:

That I am one of the co-inventors of the invention disclosed in the above-identified application, and hence am fully familiar with the subject matter therein; and

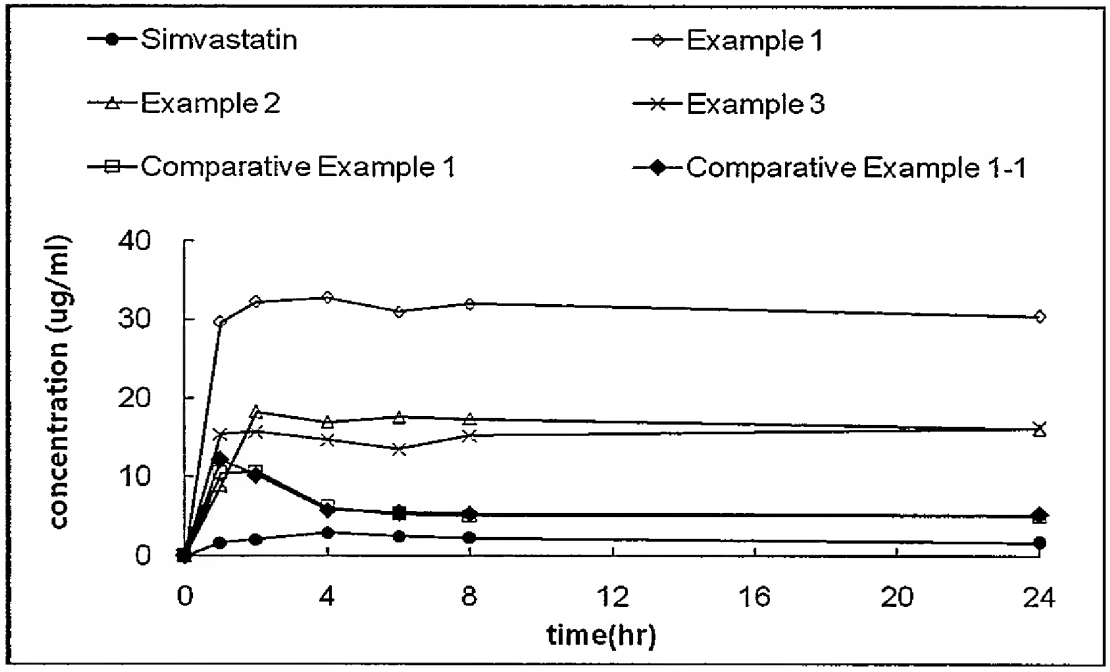
That I have conducted a series of comparative experiments to demonstrate the remarkable effects of the subject invention, as follows.

(1-1) Solubility test of solid dispersants (I)

Vitamin E TPGS 40mg was added to Comparative Example 1 to obtain Comparative

Example 1-1. Simvastatin, Examples 1 to 3, Comparative Example 1 and Comparative Example 1-1 were each subject to a solubility test by using the same method described in Test Example 1 of the subject specification. With regard to Examples 1 to 3 and Comparative Example 1, please refer to page 10 of the specification.

The result is shown in the graph below:



As can be seen from the above, although a solubilizing agent such as Vitamin E TPGS was added in the process for preparing Comparative Example 1-1, the solubility thereof is similar to that of Comparative Example 1 which does not contain any solubilizing agent since the solubilizing agent in Comparative Example 1-1 was added after the preparation of the solid dispersant.

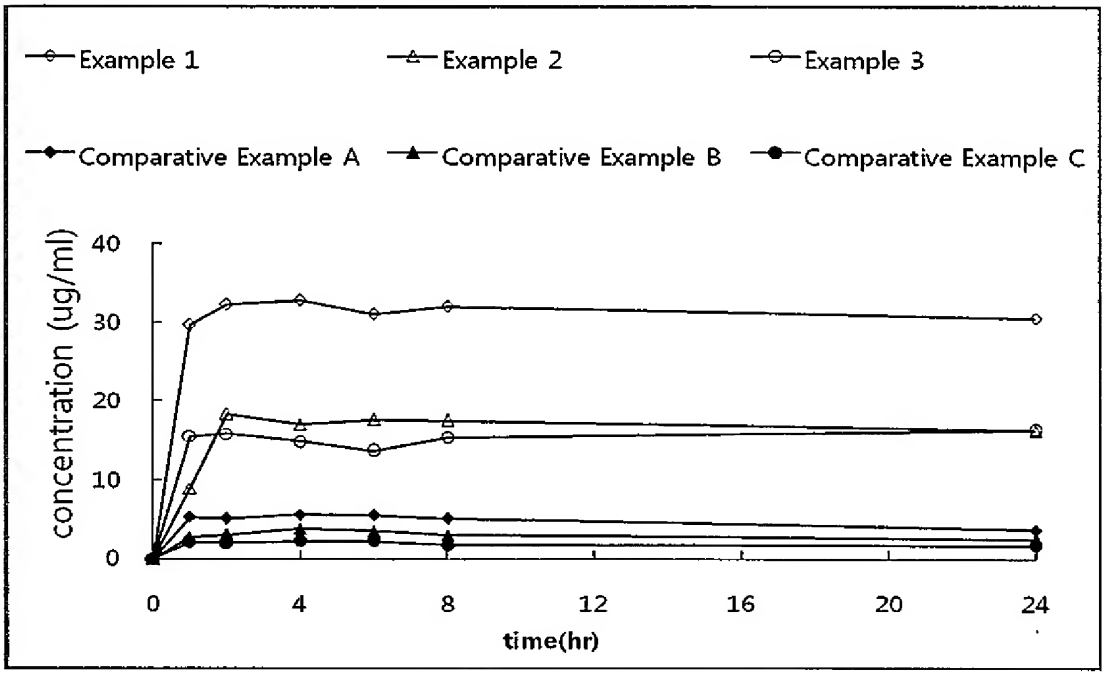
(1-2) Solubility test of solid dispersants (II)

The Comparative Examples A to C were prepared by simply mixing the components of Example 1 to 3, respectively, as follows:

Examples	Comparative Examples
Example 1 in Table 1 of the specification	A: Simple mixture of simvastatin 40mg, Vit E TPGS 80mg, BHT 2mg, and HPMC 2910 100mg
Example 2 in Table 1 of the specification	B: Simple mixture of simvastatin 40mg, Vit E TPGS 40mg, BHT 2mg, and HPMC 2910 100mg
Example 3 in Table 1 of the specification	C: Simple mixture of simvastatin 40mg, Vit E TPGS 40mg, BHT 2mg, and HPMC 2910 50mg

Examples 1 to 3 and Comparative Examples A to C were each subject to a solubility test by using the same method described in Test Example 1 of the subject specification.

The result is shown in the graph below:



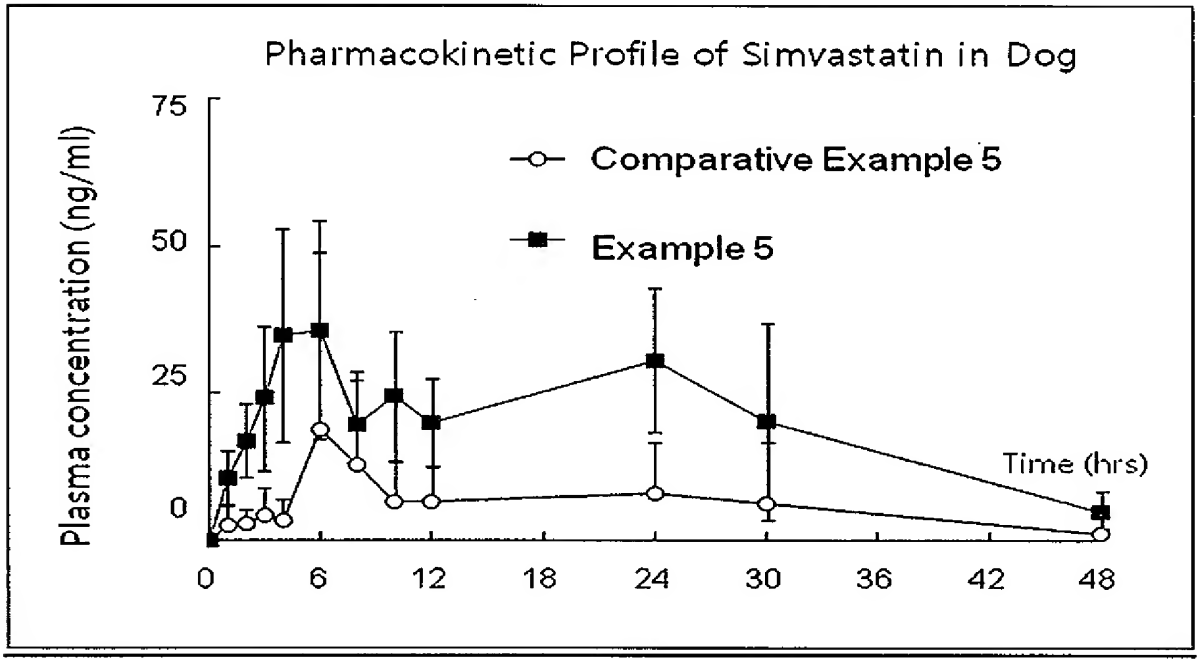
As can be seen from the above, the inventive formulation comprising the solid dispersant shows a markedly higher water-solubility than the comparative formulations prepared by simply mixing the components.

(2) Pharmacokinetic test

The components of Example 5 (*see* page 11 of the specification) were mixed and directly compressed to obtain a direct-compression tablet (Comparative Example 5).

The formulations of Example 5 and Comparative Example 5 were each administered to male beagle dogs (10 to 15 kg) in an amount of 20 mg/kg.

The pharmacokinetic profile was measured according to a conventional method, and the result is shown in the graph and the table below:



	C_{max} (ng/ml)	AUC (ng.hr/ml)
Example 5	45.7 ± 14.5	966.0 ± 387.1
Comparative Example 5	25.0 ± 27.5	293.4 ± 253.7

In view of the above, it is clear that the subject invention has much higher

bioavailability than the corresponding direct-compression tablet which contains the same components as the subject invention.

(3) Stability test

Example 5 and Comparative Example 5 as mentioned above were each subject to a stability test at 40℃ and 75% RH (Relative Humidity), and the result is shown in the table below:

	Initial	1 month	3 month	6 month
Comparative Example 5	100	98.4	96.9	94.8
Example 5	100	99.8	99.0	98.1

As can be seen from the above table, the subject invention shows improved stability compared to the corresponding direct-compression tablet which contains the same components as the subject invention.

The undersigned declarant further declares that all statement made therein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of United States Code and that such willful false statements may jeopardize the validity of the instant patent application or any patent issuing thereon.

Dated: June 25, 2010 By: Si Young Jung

Si Young Jung